

wings were burnt orange with a broad blackish brown terminal shading.

After some research the insect was eventually identified in *Atlas d'Entomologie Lepidopteres de France*, Tome II as *Polyphaenis sericata*. The distribution is given as 'all of France with the exception of the northern regions'. This moth is figured in Michael Chinery's new *Collins Guide to the Insects of Britain and Western Europe*.

This species was first recorded in Guernsey by the eminent local entomologist Mr. W. A. Luff in July 1872 at sugar and that specimen was figured in *Entomologist* 9: 73. In Luff's article on Non-British insects published in the 1907 *Transactions of The Guernsey Society of Natural Science and Local Research* (now *La Societe Guernesiaise*) he states that he had taken several more specimens.

As far as local records show this was probably the first Guernsey record of this species for at least eighty years. RICH & MARGARET AUSTIN, Maymyo, Les Amballes, St. Peter Port, Guernsey. C.I.

EXPERIENCES WITH THE WHITE-BARRED CLEARWING, SYNANTHEDON SPHECIFORMIS D. & S. (LEP.: SESIIDAE) — I had long been aware that Mr. B. R. Baker, of Reading, was very knowledgeable about that fascinating family of moths, the clearwings. Accordingly, in May 1986, I rang him and asked if he could help me with *spheciformis*. Up to quite recent times here, *spheciformis* mines were made in alder (*Alnus sp.*). Then, following winter cutting by contractors supplying birch for steeplechase fences, the moth became reasonably plentiful in the stumps of birch. These stumps were usually between 1 and 8 cm diameter and an average of 24 cm above ground level.

Mr. Baker told me that the cutting of birch, on the heath south of Reading, had not been as great as usual; but that it might be possible to locate a few mines. Accordingly, on 14th May I joined him for a search of the Reading heaths. It was a cold day, with some persistent rain; our spirits were not much lifted by the observation that many pupae had been removed by birds. However, under Brian Baker's excellent guidance, we cut a few stumps which held possibilities, some showing clearly the exit prepared by the larva — a circle of bark 6 mm diameter, slightly discoloured, which gave under slight pressure.

In all, eleven sticks were cut. For their reception I had prepared a small aquarium (33cm x 24cm) with 8cm of sand covering the bottom. Into this I stuck my birch sticks, gave the sand a good watering, covered the top with a piece of plate glass, and placed the entire structure in a glasshouse. Unfortunately, when the sun shone, the aquarium misted up. Removing the glass top produced a breath of tropical heat. Before long the birch twigs had come into

full leaf. Rather ill-advisedly, as it happened, I decided to leave the top off the tank to allow more efficient evaporation. The following morning, the 2nd June, I arrived at about 10.30 hours to inspect and, to my joy, saw a large empty pupa case protruding from the top of a stick. My delight was soon tempered with apprehension when I realised that the recent occupant was now loose in the glasshouse. However, after a few moments with a net, I had secured a fine male *spheciformis*.

Having composed myself, I returned to the tank to dry the walls of the aquarium, when I was lucky enough to observe the appearance of a pupa thrusting through the bark of a birch twig. I give the timing of the whole operation, from this point until the imago was ready to fly:

1. Pupa broke through bark at 10.51 hrs. but protruded only 6mm. Pupa swelled and shrank several times, but made no forward movement.
2. At 11.12 hrs it suddenly wriggled and completed its protrusion. The pupa was black in colour and quite sharply pointed. The full protrusion measured 1.4cm.
3. At once the two antennae sprang free and the pupa burst. The insect emerged on its back, as it freed itself from the pupa case it righted itself by gripping first the pupal case and then the birch twig.
4. The moth rapidly climbed the twig (6 cm above the exit hole) and, after a brief pause, ascended the sides of the tank and began expanding its wings. Full expansion was achieved 19 minutes after eclosion. The wings at this point were held butterfly-like over the back.
5. After 11 minutes the wings were lowered into the normal position and the insect was ready for flight. The whole operation took 51 minutes.

I was particularly struck by the length of time the insect remained so vulnerable, particularly when the pupa remained partially protruded. For the record, 11 sticks produced 9 perfect moths — 5 males and 4 females. One stick, 3.1 cm diameter, yielded 3 pupae; but two of the largest stumps, some 8 cm diameter, produced no pupae, but masses of frass — suggesting that they contained only first year larvae. E. C. L. SIMSON, Crossbythwaite, Plowden Park, Aston Rowant, Oxford OX9 5SX.

AN UNUSUAL ABERRATION OF THE DUKE OF BURGUNDY FRITILLARY, *HAMEARIS LUCINA* L. — While observing these butterflies on Noar Hill, Hants on 8 June 1986 (and incidentally was pleased that they were in reasonably good numbers) an unusual aberration was seen. At first, on the wing, it looked like a